

United States Department of Agriculture
Animal and Plant Health Inspection Service
Plant Protection & Quarantine
4700 River Road
Riverdale, MD 20737

Permit to Move Live Plant Pests, Noxious Weeds, and Soil
Interstate Movement
Regulated by 7 CFR 330

This permit was generated electronically via the ePermits system

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|-------------------------|--|----------------------------|-----------------|
| PERMITTEE NAME: | Erika Rohr Luke | PERMIT NUMBER: | P526P-18-02664 |
| ORGANIZATION: | Marrone Bio Innovations | APPLICATION NUMBER: | P526-180312-023 |
| ADDRESS: | 1490 and 1530 Drew Avenue Davis, CA 95618 | FACILITY NUMBER: | 3576 |
| MAILING ADDRESS: | 1530 Drew Avenue Davis, CA 95618 | HAND CARRY: | Yes |
| PHONE: | 530-750-2800 | DATE ISSUED: | 07/06/2018 |
| FAX: | | DATE AMENDED: | 12/18/2019 |
| DESTINATION: | Marrone Bio Innovations, 1490 and 1530 Drew Avenue, Davis, CA 95618 | EXPIRES: | 07/06/2021 |
| RELEASE: | No | | |

Under the conditions specified, this permit authorizes the following:

| <u>Regulated Article</u> | <u>Life Stage(s)</u> | <u>Intended Use</u> | <u>Shipment Origins</u> | <u>Originally Collected</u> | <u>Culture Designation</u> |
|-----------------------------|--|---|-----------------------------|--|--------------------------------|
| Pseudomonas aeruginosa | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. | |
| Pseudomonas agarici | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. | |
| Pseudomonas alboprecipitans | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. | |
| Pseudomonas amygdali | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. | |
| Pseudomonas asplenii | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. | |

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Osmond Baron


DATE

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| <i>Pseudomonas avellanae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas betle</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas cannabina</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas caricapapayae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas cichorii</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas cissicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas citronellolis</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas corrugata</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas costantinii</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas ficuserectae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas flavescens</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas flectens</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas fluorescens</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |


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| <i>Pseudomonas fuscovaginae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas gingeri</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas gladioli pv. agaricicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas hibiscicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas marginalis</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas marginalis pv. alfalfae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas marginalis pv. marginalis</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas marginalis pv. pastinacae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas mediterranea</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas meliae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas palleroniana</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas putida</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas pv. passiflorae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |

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| <i>Pseudomonas reactans</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas rubrisubalbicans</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas salomonii</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. nerii</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. fraxini</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. glycinea</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. oleae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. phaseolicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. retacarpa</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas savastanoi pv. savastanoi</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas spp.</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Growth Chamber (lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas striafaciens</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |

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| Pseudomonas syringae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv aesculi | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv atropurpurea | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv ciccaronei | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. aceris | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. actinidiae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. alisalensis | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. antirrhini | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. apii | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. aptata | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. atrofaciens | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. atropurpurea | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. berberidis | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |

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| <i>Pseudomonas syringae</i> pv. <i>brousonetiae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>cannabina</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>castaneae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>cerasicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>ciccaronei</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>coriandricola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>coronafaciens</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>cunninghamiae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>daphniphylli</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>delphinii</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>dendropanacis</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>dysoxyli</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>erobotryae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |

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| Pseudomonas syringae pv. garcae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. glycinae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. helianthi | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. hibisci | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. lachrymans | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. lapsa | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. maculicola | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. mellea | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. mori | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. morsprunorum | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. myricae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. oryzae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. papulans | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |


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| <i>Pseudomonas syringae</i> pv. <i>passiflorae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>persicae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>persicae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>phaseolicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>philadelphii</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>photiniae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>pisi</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>porri</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>primulae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>raphiolepidis</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>ribicola</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>sesami</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| <i>Pseudomonas syringae</i> pv. <i>solidagae</i> | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |


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| Pseudomonas syringae pv. spinaceae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. striafaciens | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. syringae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. tabaci | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. tagetis | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. tagetis | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. theae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. tomato | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. tremae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. ulmi | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. viburni | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syringae pv. zizaniae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas syzygii | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |

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| Pseudomonas tolaasii | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas tremiae | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas viburni | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |
| Pseudomonas viridiflava | Lyophilized plant or microbes, Microbial solutions, Pest-infected plant material, Petri dishes/culture tubes, Plant Parts, Whole Plants | Research - Greenhouse (growth chamber and lab included) | Continental U.S. | Originally Collected from Within the Continental U.S. |


PERMIT CONDITIONS

USDA-APHIS issues this permit to Erika Rohr Luke of Marrone Bio Innovations, in Davis, California. This permit authorizes continued curation of pure cultures of the listed organisms received under previous permits, and the interstate movement of pure cultures or infected plant material containing the organisms listed in the permit from researchers within the Continental United States to California.

This authorization is for research use in the laboratory, growth chamber and greenhouse within in the APHIS approved facility # 3576. Foreign isolates are not authorized.

- This permit is issued by the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS). It conveys APHIS regulations and requirements for the material(s) listed on this permit. It does not reduce or eliminate your legal duty and responsibility to comply with all other applicable Federal and State regulatory requirements.
 - The permit number or a copy of the permit must accompany the shipment.
 - You must be an individual at least 18 years old, or legal entity such as partnership, corporation, association, or joint venture.
 - You are legally responsible for complying with all permit requirements and permit conditions.
 - If you violate any applicable laws associated with this permit, you may face substantial civil or criminal penalties. We may cancel all current permits and deny future permit applications.
 - Without prior notice and during reasonable hours, authorized Federal and State Regulators must be allowed to inspect the conditions associated with the regulated materials/organisms authorized under this permit.

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2. The permit holder must:

- maintain a valid PPQ526 permit so long as the regulated materials/organisms are alive or viable,
- not assign or transfer this permit to other persons without APHIS PPQ authorization,
- maintain an official permanent work assignment, residence, or affiliation at the address on this permit,
- notify the Pest Permit Staff as soon as possible of any change in the permit holder's work assignment, residence, or affiliation,
- notify the Pest Permit Staff of the receipt of unauthorized and/or misdirected shipments of regulated materials/organisms,
- adequately mitigate environmental impacts resulting from unauthorized release of regulated materials/organisms and notify the Pest Permit staff immediately if one occurs,
- notify the Pest Permit Staff if the facility is damaged/destroyed or if you wish to decommission the facility,
- destroy all regulated materials/organisms prior to departure from the organization unless other arrangements are confirmed by the Pest Permit Staff.

Notifications to the Pest Permit Staff must be made via 866-524-5421 or pest.permits@aphis.usda.gov within one business day of the event triggering a notification.

3. This permit does not authorize movement or use of plant pathogens listed in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002. If any organism listed as a Select Agent is identified from materials associated with this research, the permit holder is required to notify APHIS, Agriculture Select Agent Services (AgSAS) immediately by phone at 301-851-3300 option 3, and within seven (7) days submit APHIS/CDC Form 4A (Report of Identification of a Select Agent or Toxin in a Clinical or Diagnostic Laboratory) to APHIS, AgSAS; 4700 River Rd, Unit 2, Riverdale, MD 20737 (see instructions at: https://www.selectagents.gov/resources/APHIS-CDC_Form_4_Guidance_Document.pdf). Failure to comply with this requirement is a violation of the Agricultural Bioterrorism Protection Act of 2002. Plant pathogen select agents currently listed include: *Peronosclerospora philippinensis*

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(*Peronosclerospora sacchari*), *Conothyrium glycines* (formerly *Phoma glycinicola* and *Pyrenochaeta glycines*), *Ralstonia solanacearum*, *Rathayibacter toxicus*, *Sclerophthora rayssiae*, *Synchytrium endobioticum*, and *Xanthomonas oryzae*.

4. All persons working with the listed regulated materials/organisms must be informed of these permit conditions. Anyone working with these materials/organisms must agree to and sign/initial these conditions before beginning work. These signed conditions do not need to be submitted to USDA/APHIS but must be readily accessible and made available to Federal and State regulators upon request.

Note: these conditions may be copied and stored electronically for electronic signature and initialing provided that the permit number, authorized materials/organisms and life stages, release locations if applicable, and authorization statement all appear on the document with the permit number. Signing these conditions only indicates that the person working under this permit has read them; the permit holder is the sole responsible party under this permit.

5. Field-collected samples of infected plant material must be bare-root or washed free of soil prior to shipment to the permit holder.
Plant samples deliberately inoculated with these organisms in a controlled environment such as a laboratory, growth chamber, or greenhouse that have been grown in sterilized soil or soilless mix may be shipped to the permit holder with attached soil or growing media.
6. All packages for transport must minimally consist of both inner/primary and outer/secondary packages securely sealed so that both are effective barriers to escape or unauthorized dissemination of the listed materials/organisms. The inner/primary package(s) will contain all regulated materials/organisms and must be cushioned and sealed in such a way that it remains sealed during shock, impact, and pressure changes that may occur. The outer/secondary shipping container must be rigid and strong enough to withstand typical shipping conditions (dropping, stacking, impact from other freight, etc.) without opening.
7. Upon receipt, all packages must be opened within a Class II or III biosafety cabinet in the approved containment facility identified above to prevent the potential dissemination of the package contents. Cultures must be in a sealed container during transport to or within the permit holder's assigned research facilities.
8. All research activities, plant inoculations and subsequent disease development must occur within the APHIS approved Containment Facility identified above that has been inspected and found adequate for containment of the organisms received under this permit. Access to this facility must be restricted to authorized personnel.
9. Plant inoculations using organisms that are listed on this permit only at the genus level (*Pseudomonas* spp.) are restricted to the laboratory and growth chambers. Plant inoculations using organisms listed on this permit at the species level are authorized for plant inoculations in the laboratory, growth chambers, and greenhouse.

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10. Vector transmission is not permitted under this authorization. Only mechanical inoculation of plants is permitted.
11. Measures to control insect vectors (e.g. black lights, yellow sticky boards, insecticides) must be in place.
12. Greenhouses must be screened to minimize presence of insect vectors.
13. Standard Operating Procedures (SOPs) must be filed with, and approved by, the APHIS PPQ Pest Permit Staff at: email: pest.permits@aphis.usda.gov; phone: 866-524-5421; fax: 301-734-8700; address: 4700 River Road, Unit 133, Riverdale, MD 20737. All contact information must be kept current and the SOPs must be dated. If requirements in the permit conditions are more restrictive than the SOPs, permit conditions take precedence. APHIS PPQ must approve any changes to the SOPs before implementation.

A list of all persons with access to the containment facility must be maintained and available upon request by Federal or State Regulatory Officials.


14. Modifications to the containment facility or any changes that affect the containment of the regulated materials/organisms must be approved by APHIS prior to making changes. Please contact the Pest Permit Staff (email: pest.permits@aphis.usda.gov; phone: 866-524-5421; address: 4700 River Rd., Unit 133, Riverdale, MD 20737; Fax: 301-734-8700).
15. Records must be kept of all organisms maintained under this permit. Minimally the record will consist of the name of the organism identified to the lowest taxon possible, the country, or US state/territory, where each isolate was collected, and the date the isolate was received. These records must be made available to Federal and State regulators upon request.
16. When not working with the regulated materials/organisms, you must store and/or maintain them within the APHIS approved containment facility identified above. All stored regulated materials/organisms must be kept in a locked area with access limited to authorized personnel.
17. DEVITALIZATION AND WASTE DISPOSAL

All regulated materials/organisms and all items coming in direct contact or exposed to the regulated materials/organisms must be sterilized/sanitized/decontaminated prior to removal from the authorized containment facility. This includes all items from shipping, culturing, care, and maintenance of these regulated materials/organisms. This requirement includes but is not necessarily limited to: packaging directly exposed to the regulated materials/organisms, substrates (culture media, soil, plant materials (food materials or host plants)), leftover/unused/unneeded live cultures, and dead specimens/cultures unless specified otherwise in the permit.

All waste materials must be treated by one of the follow methods prior to disposal:

Use any of the following, either alone or in combination: 1) autoclaved (see protocol below), 2) disposed of off-site by a facility holding a valid PPQ compliance agreement (organisms and/or

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contaminated waste must be stored in sealed containers prior to pick up by this company), 3) incinerated, 4) immersed in 5 percent sodium hypochlorite (household bleach from the bottle is 5 percent) for at least 20 minutes, or 5) immersed in 70 percent alcohol for at least 30 minutes. Treated waste will be double bagged prior to disposal.

Other sterilization methods are only allowed with prior written agreement from the USDA/APHIS PPQ Pest Permit Staff.


Any equipment, supplies, tools, secondary shipping containers, packing materials (e.g, ice packs), etc. must be sterilized/sanitized/decontaminated prior to reuse, disposal, or removal from containment.

If using an autoclave the following protocol must be used:

- a. Waste must be autoclaved at 121 Celsius (250 Fahrenheit) for a minimum of 30 minutes at 15 psi.
 - b. Autoclave tape or other indicators must be placed on each load prior to treatment. The autoclave tape or other indicator on each container must be checked to verify color change before disposal.
 - c. The autoclave must be calibrated according to the manufacturer's instructions annually and a written record must be maintained.
 - d. Every 3 months, you must use a commercially available biological indicator kit that uses bacterial spores of *Geobacillus stearothermophilus* that are rendered unviable at 121 Celsius (250 Fahrenheit). You must follow the manufacturer's instructions. If any growth is observed, you must have the autoclave serviced and retested.
18. Devitalization/destruction of organisms and infected material may be conducted off site by a facility holding a valid PPQ compliance agreement prior to disposal. Vendor may or may not be in the same state. All organisms, contaminants and/or packaging materials must be in sealed containers during transport to this waste management facility in order to prevent any unauthorized dissemination of the regulated articles.
 19. There is to be no further movement or distribution of the listed regulated materials/organisms within the United States and its territories unless the recipient holds, or is named as a responsible party on a valid PPQ526 permit for receipt of such materials/organisms.

END OF PERMIT CONDITIONS

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